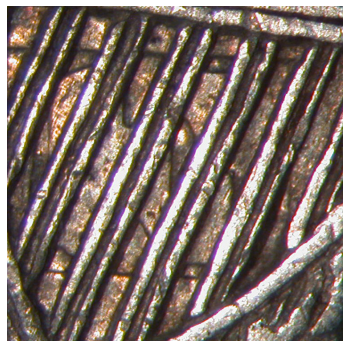


# Longacre's Ledger

*The Journal of The Flying Eagle and Indian Cent Collectors' Society*  
Volume 29.1, Issue #105 [www.fly-inclub.org](http://www.fly-inclub.org) April 2019



***1858 Quarter Clashed  
with a Cent***  
by Richard Snow



***Finding the 1858 Clashed  
Quarter***  
By Steve Feltner



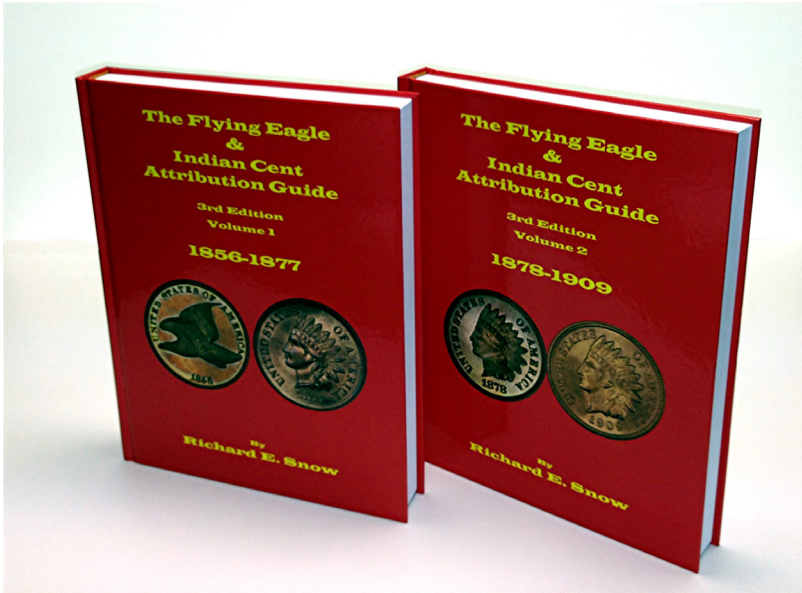
***A New Counterfeit  
1909-S Indian Cent***  
By Richard Snow

*ed with a chill on  
followed by acute  
tary which has kept  
to the present time.  
Yours to  
James B. Longacre*

***Longacre's  
Deathbed Letter.***  
By Richard Snow

Available now!

## The Flying Eagle and Indian Cent Attribution Guide Third Edition



**This is a two-volume set, 900 pages, color and hardcover.**

Every American alive during the tumultuous years from before the Civil War to the time of Teddy Roosevelt carried in their pockets Indian cents. They are an integral part of the history of the United States. The times that influenced these coins are detailed in a year-by-year historical review. All Proofs, Patterns, Experimental and Trial pieces from 1850 onward are listed and given a full analysis. Every premium-value variety is detailed with updated condition census information and premium pricing factors.

This is the result of 25 years of research by Rick Snow. Help from the membership of the Fly-In club since its founding in 1991 has also expanded the information within these covers.

Order your copy today. Autographed upon request.

**\$199.00** Plus \$5 postage.

**E-book (pdf) available for \$75.**

*The Guide Book of  
Flying Eagle and Indian Head Cents  
3rd Edition  
By Richard Snow*

The newly released book in the "Bowers' series" of books by Whitman Publishing. New prices, images, and a greatly expanded chapters.

**100 top Varieties listed!**

**PDS Grading explained**

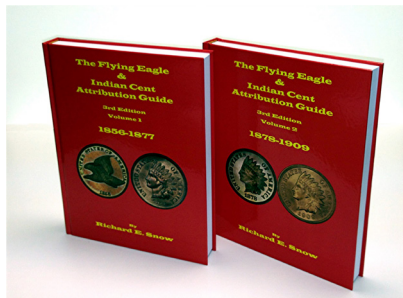
**Counterfeits, Patterns and Proofs.**

**Plus a brand new section including photographs on Flying Eagle and Indian cent exnomia by Charmy Harker "The Penny Lady"**

**\$19.00 Plus \$3.50 shipping.**

Eagle Eye  
P.O. Box 32891  
Tucson, AZ 85751

Check, VISA, M/C,  
Discover/ AmEx/ PayPal accepted.  
Order by phone at 866-323-2646,  
On-line at [www.indiancent.com](http://www.indiancent.com),  
PayPal at [rick@indiancent.com](mailto:rick@indiancent.com)







# The Flying Eagle and Indian Cent Collectors' Society

Our mission is to gather and disseminate information related to  
James B. Longacre (1794-1869), with emphasis on his work as  
Chief Engraver of the Mint (1844 -1869) with a primary focus on his  
Flying Eagle and Indian Cent coinage.

*Founded 1991*

**www.fly-inclub.org**

## Club Officers

President.....	Chris Pilliod	CPilliod@cartech.com
Vice President .....	Tim Cartwright	tcartwright@floratine.com
Secretary .....	Sheldon Freed	marsfreed@verizon.net
Treasurer .....	Vern Sebby	melve6906@indianvalley.com
State Representatives Chairman .....	Charmy Harker	Charmy@ThePennyLady.com
Editor.....	Rick Snow	rick@indiancent.com
Webmaster.....	Dave Noble	tdnoble@sbcglobal.net

## State Representatives

*The following individuals have indicated their willingness to help promote the club and its activities in their state.*

Arizona.....	Rick Snow	rick@indiancent.com
California .....	Charmy Harker	charmy@thepennylady.com
Colorado.....	Mark Hammang	mhammang@hotmail.com
Delaware .....	Jesse L. Furry, Sr.	tinman44pa@gmail.com
Florida .....	Richard Spencer	rsinvestments@comcast.com
Idaho .....	Dan Templeman	coindan@q.com
Indiana.....	David Brody	dbrody@galaxyinternet.net
Kansas .....	Mark McWherter	markimc@att.net
Louisiana.....	Lynn Ourso	neworleansrarecoins@gmail.com
Michigan.....	Jason Rodgers	jason@bedfordcoin.com
Montana .....	M.P. Hamill	hamill@bresnan.net
Nebraska .....	Quent Hansen	quentncathy@aol.com
New Jersey .....	Doug Ball	dball59743@comcast.net
New York .....	W.O. (Bill) Walker	worian@aol.com
Ohio.....	David Dannemiller	daviddannemiller@icloud.com
Oklahoma.....	Russell Doughty	rustymonroe@gmail.com
Oklahoma.....	Michael Hassler	rarensense@mail.com
Pennsylvania .....	Chris Pilliod	cpilliod@msn.com
South Carolina...	Jerry Sajbel	jerome.sajbel@basf.com

Please help the editor in updating any errors or changes. If you would like to become a  
state representative (there can be more than one per state) please contact the editor.

### On the cover...

The discovery specimen of the 1858 Liberty Seated quarter reverse die  
clash from the reverse of a Flying Eagle cent.

Copyright 2019, The Flying Eagle and Indian Cent Collectors' Society, "The Fly-In Club." All rights reserved. Articles, opinions and comments appearing in this journal reflect the views of their authors and may or may not agree with those of the Editor or the Society. The Society specifically reserves the right to edit copy, require payment in advance, suspend advertising privileges, or decline any article, letter to the editor, advertisement or other submitted material in part or in whole at its sole discretion. No part of this Journal may be reproduced, in whole or in part, by any means, without permission from the Society.

# Longacre's Ledger

2019 Vol. 29.1 Issue #105

---

## Contents

### Featured Articles

<i>1858 Quarter Clashed with a Cent</i> by Richard Snow .....	10
<i>Finding the 1858 Clashed Quarter</i> By Steve Feltner .....	12
<i>Another Counterfeit 1867 Snow-8 Indian Cent</i> By Richard Snow .....	14
<i>A New Counterfeit 1909-S Indian Cent</i> By Richard Snow .....	15
<i>Burnished Dies</i> By Richard Snow .....	16
<i>Longacre's Deathbed Letter.</i> By Richard Snow .....	24

<i>Something New</i> 1872 Bold N S11, 1874 S11, 1889 S42, S43, 1890 S21, 1902 S19, 1907 S70. By Richard Snow .....	26
<i>President's Letter</i> .....	5
<i>Club News</i> .....	8
<i>Treasurer's Report</i> .....	9

Editor: Rick Snow  
P.O. Box 32891 Tucson, AZ 85751  
(866) 323-2646  
rick@indiancent.com

---

## Submission guidelines

If you have a substantive article you would like to contribute, please follow these guidelines:

- ✓ If you have internet access, you can send text to the editor's e-mail address below. Please send images in separate files.
- ✓ You may also send files and images on a CD-W disk or other storage device to the editor's address below. Storage devices will be returned upon request.
- ✓ Images of material can be made by the editor for use in the Journal. Please include the necessary return postage with the submission.
- ✓ Please feel free to contact the editor if you have any questions.

## Submission deadlines

Please submit all articles, letters, columns, press releases and advertisements no later than the following dates to assure inclusion:

Issue	Deadline	Show issue
#106 2019 Vol. 29.2 ...	July 1, 2019.....	ANA 2019
#107 2019 Vol. 29.3 ...	November 1, 2019.....	FUN 2020
#108 2020 Vol. 30.1 ...	March 1, 2020 .....	CSNS 2020
#109 2019 Vol. 30.2 ...	July 1, 2019.....	ANA 2020

---

## Advertising Rates:

Per year - Three issues

Send payment to Treasurer  
Send ad copy to Editor.

Quarter Page: .....	\$75
Half Page.....	\$150
Full page.....	\$300
Inside back cover .....	\$750
Outside back cover .....	\$1,200

## Membership

\$25 per year.

Download applications at  
[www.fly-inclub.org](http://www.fly-inclub.org)

Fly-In Club

P.O. Box 559

Sandwich, Illinois 60548

Or send the payment via Paypal to:  
[flyincoinclub@gmail.com](mailto:flyincoinclub@gmail.com)

Special thanks to Charmy Harker  
for proofreading the articles.



## *The President's Letter*

*By Chris Pilliod*

This is my 63rd President's letter. There's a ribbon of a town just seven miles from here, nestled along a mostly dry creekbed. And everytime I drive through it I wonder the same thing... "Does anyone even live here?" I never see any homes; just buildings, vacant storefronts, mom-and-pop shops, old barns and nondescript things. There may be a couple homes hidden in the background, but not many to be sure.

But it's also a town with a lot of name recognition. In fact I may have mentioned this same town years ago in a previous correspondence. It's because those smelly chicken coops and dusty livestock barns vibrate with life on the weekends and transform into a bustling haven for flea market merchants and milling customers. It was at one of these booths back in the 1990's when a customer spotted an old wooden frame with an ugly oil painting, which he desired for restoration to house an elegant painting he had in mind. Once home he began carefully disassembling the old frame when out of the backing fell to the floor a parchment of paper, yellowed from age. It was an original signed Declaration of Independence. Most people don't realize it but 26 original copies were signed for the various states and officials. A few years after the discovery the guy sold his jaw-dropping discovery for \$3 Million and still had his \$7 frame. I guess that's what you call a win-win deal.

Years after this I had my own serendipitous purchase, but on a much, much smaller scale. From a dealer at the "Green Dragon Market" (one of the more famous of the couple dozen markets) I bought a coffee can of Buffalo nickels for 40c each. They had full dates but were the usual mill-run 1930 and later, mostly VG's or so... ones I could make a nickel each on. But once home as I poured through them one in particular stuck out, a nice AU+++ fully lustrous example. It stuck out like a sore thumb. Here lay this stunning 1935 Buffalo nickel, so much nicer than the rest I thought someone threw it in there as a teaser... much like dealers who seed bags of wheat cents with steelies or teens.

I always turn 1935's over to check for the strong and desirable Doubled Die reverse on "FIVE CENTS." Rarely ever do I find them, and when I do they are always heavily circulated, maybe VF at the very highest. But this time.... Bammmmm! I hit paydirt.

Not only was it a very high condition piece, it was an extremely early die state with crisp doubling observed throughout. In the midst of those 40c nickels was buried a \$2,000 treasure.

Three more zeroes and I would have been on Oprah. Or worse yet, if my heart would have skipped just one more beat, I may have been the next guest on the All New Doctor Oz Show.

Some time after this on another trip to Green Dragon I met up with a dealer friend who opened up a zipped bank pouch of coins. Nice original Bust Halves are a steady staple here in the southeast Pennsylvania corridor and not surprisingly there was a few of those I picked up. But in the bottom of the pouch mingled loosely in the group was a nice choice chocolate brown 1796 Large Cent Draped Bust in nice original VG or Fine. For \$200 I thought I can't go wrong. I am by no means an expert on Sheldon or Large Cent attribution. I didn't even know until I got home and studied it was reverse of 1797. It was nice enough to make a group I sent into NGC for grading and attribution. And a few weeks later I was surprised to get in the mail a 1796 NC-1 in the mail. "NC" is a designation for "Non-Collectible" because of rarity. Unlike later copper coinage early Large Cents had no zinc or tin to modestly help mitigate corrosion. So to find a nice original problem-free chocolate brown 1796 was a surprise in and of itself. Being an NC is icing on the cake. I am not sure of it's value, but some day I'll find out. For now it is tucked away for a rainy day.

And so once again this past March on a gloomy Sunday morning I found myself driving past vacant barns and gift shops heading to Renninger's flea market in Adamstown. Another find awaited, this one a bit more curious and historical in nature than any monetary boon. "Brownie" is a dealer who seems to buy just about everything that comes his way. No matter what it is. He seems to be a magnet for nice quality old type coins. And this area is fertile ground for origi-



nal Bust coinage, Seated as well as nice copper and 20th Century. As I glanced through his glass counters he murmured “nothing new Chris.” But I said no, no, no “I don’t remember that stack of Indian Cents right there.” I would have remembered a nice looking 1874, not a major key but also not an easy find in original mint state either.

Like always, he simply grabbed them and tossed the group my way. I took the rubber bands off the holders and caught myself saying “wow, there’s not just one nice 1874, there’s nine of ‘em!!” The group had nine original 1874 Indian cents, all red and brown and in untouched original mint state. A very nice hoard indeed. So I set aside the three nicest ones by grade and asked Brownie to take a break from purchasing a stack of Proof sets from the 1960’s. and headed home after cash settlement.



And that’s where the fun began. Once home, I gave them a full review and it soon dawned on me that the whole batch was not only mint state but also they had never left each others company in 145 years time. That’s correct... I quickly became convinced this small handful of cents never lost sight of each other in their entire 145 years of existence. How was I so sure? The odds of finding two of three coins struck from the same exact die pair are extremely remote, especially on a relatively high mintage date such as 1874 Indian cent. Let’s do a little basic math here. We know enough about the metallurgy of the day to make a safe guess that a cent die probably struck in the neighborhood of 100,000 cents before they were retired for wear or fatigue, such as die breaks. With over 14 million cents struck in 1874 that equates to roughly 140 sets of dies consumed for striking cents in 1874.



*1874 “Constellation”*

So the chances of buying two 1874 Indian Cents with the exact same die breaks on the obverse as well as reverse is extremely low. In addition you could easily determine that each piece laid on a particular side all those years, as one side definitely showed the effect of a different patina from reaction to its environment.

But it wasn’t until I put the third piece under magnification that something jumped out at me. The first feature I noticed was an extra hair curl below the Indian’s locks to the northwest of her ear. I thought I had discovered a very strong unlisted doubled die. It looked exactly like another hair curl. But upon higher magnification I determined it was a coincidentally shaped die chip. After all, it’s not at all unusual to find die chips on dies, and 1873 and 1874 are banner years for these. Perhaps the most famous of all.

But then I noticed hey there’s not one die chip, but two, three, four, five and now six maybe seven



small die chips speckling the face of Miss Liberty like an unknown “Constellation.” Wow I thought... “I’ve never seen this one!” While die cracks are OK, a variety with die chips arranged like pepper on eggs is really cool. Like a unknown constellation on the face of Miss Liberty is really cool, or at least to me. And then it dawned on me... damn I left six back at the flea market!!!

So you might have a good idea what I did bright and early the very next Sunday morning. Yep, high-tailed right back to Renninger’s. And when I got there I whispered whewwww, the stack is still there intact. Please, please, please be a couple more “Constellations.” OK, first one has those damn die cracks. Second one, damn another die crack piece. C’mon there’s gotta be a Constellation. Then the third one, bammmmm there’s one! Great news... another “Constellation”!!! I made two piles, one with die cracks, and one of the Constellations. Final tally including this group of six... Five die cracks, four Constellations. I was a happy, very happy numismatist.

“So Brownie,” I said, “someone brought all of these in at one time, right? Lemme guess, they just carried them in a sandwich bag. And had no idea what they were worth. And they were renovating a house.” “Yep, Chris spot on, spot on. Yep, just a couple weeks ago. A guy and his wife brought them in a sandwich bag or brown bag. Almost all were 1874, a few more common dates. You passed on those. They cleaned one of the 1874’s before someone told them to leave the batch as-is.”

I noticed one of the 1874’s looked like a pumpkin after the guy took a Brillo pad to it. Someone must have told him after he showed them the piece... “hey, don’t do that again!!!!” Thankfully he did not. And thankfully, he did it on a die crack version. The cleaned one I paid \$100 for and quickly sold on eBay for \$135 to be rid of it. But the other eight were as pristine and fresh as the mornin’ dew. I submitted five to the grading services, held back three with the nicest Constellation still raw and now residing in my collection.

After all this excitement of course I have to share the discoveries with you. Shown is a group photo of six of the nine pieces. Then the closeups of the “Constellation” variety. In summary I would be very curious if any 1874 Constellations reside in one of our members’ collections. But bear in mind that the die chips reside in an area that wears first, so examples XF or lower may be difficult to attribute with certainty.



*1874 “Constellation”*



*1874 “Constellation”*





The Fly-In Club meeting was held at the FUN show in Orlando Florida in January. Chris Pilliod gave a talk on “My Ten Favorite Errors.” In attendance were the following:

Larry H.	Oklahoma City, Oklahoma
Jack K.	West Palm Beach, Florida
Kevin C.	St. Augustine, Florida
William A.	Merritt Island, Florida
Jonathan A.	Charlotte, North Carolina
Vern S.	Sandwich, Illinois
Alex P.	Crystal Lake, Illinois
Glen M.	Parma, Ohio
Charmy H.	Irvine, California
Harriette C.	Montpelier, Virginia
Ron H.	Bald Knob, Arkansas
Jessica W.	Bald Knob, Arkansas
Terry R.	Bald Knob, Arkansas
Don R.	Knoxville, Tennessee
Greg D.	Valrico, Florida
Ken H.	Seattle, Washington
Rick S.	Tucson, Arizona
Chris P.	Reading, Pennsylvania

***Charmy Harker***  
***CSNS Lifetime Achievement award***



Charmy Harker has been awarded a inaugural “Lifetime Achievement Award” by Central State Numismatic Society. We would like to extend our own thanks as a club to her for her efforts in promoting Flying Eagle and Indian cents. Charmy contributes to the editing of the Longacre’s Ledger as well as supplying articles.

Be sure to read Charmy’s latest article, “Louis S. Werner’s Novel Cent” in the April issue of *The Numismatist*.

**Rick Snow will be teaching “The Secrets of Flying Eagle and Indian Cents” as the ANA Summer Seminar, first session, June 15-20, 2019.**



The back issues of the Longacre’s Ledger are now accessible on the Newman Numismatic Portal. The site is managed by the Washington University in St., Louis, Missouri. Access is free to all and the files can be viewed at the following link:

<https://nnp.wustl.edu/library/publisherdetail/521577>

Special thanks to Len Augsburger for working on this.





***Treasurer's Report***  
***By Vern Sebby***

As an ongoing feature, we'd like to welcome our new members:

<b>Member</b>	<b>State</b>	<b>Sponsor</b>
Mike B .....	Arizona	Rick Snow
David L .....	Pennsylvania	Rick Snow
Jonathan A .....	North Carolina	FUN 2019
Harriette C .....	Virginia	FUN 2019
Dan M .....	Georgia	Rick Snow
Kenneth S .....	Illinois	none
Jack T .....	New Jersey	none
Alvin H .....	New York	none

Thank you for joining us. If you haven't already done so, please check out our website and online talk forum at [www.fly-inclub.org](http://www.fly-inclub.org). If you have any questions or comments about the club, please contact me.

**Vern Sebby**  
**PO Box 559**  
**Sandwich, Illinois, 60548**  
**email, [melva6906@indianvalley.com](mailto:melva6906@indianvalley.com).**

Often, when members renew, they take a moment to add a comment. Here are some of them (paraphrased if appropriate):

Jim P – Keep up the great job!

Alan E – Enjoy the editions very much. Thanks.

Wayne J – I really love your mag.. It has a lot of information on so many different things, like errors & patterns, plus reg cents. The only thing I would wish for would be (information on) MS-62 grade.

Lee T – Thanks for allowing multi-year renewals.

Bob T – We need to encourage members to submit articles, not fair to Rick. I've done 2 and will do more.

James L – I think you should write an article about the club meeting each year, and put a picture of the people who attend.

C Dee C – Article on identifying counterfeit Indian head pennies at coin shows using magnets, UV light, edge markings, etc. Keep up the good work on the ledger.

Also, we would like to thank members who made a donation along with their 2018 membership renewal:

You can donate to the Fly-In club by sending any payment you want by PayPal to

**[Flyincoinclub@gmail.com](mailto:Flyincoinclub@gmail.com)**

*1858 Quarter Clashed with a Cent  
by Richard Snow*



**PCGS Coin Facts: 1858 25C FS-901 Rev Die Clash w/ Rev of FE 1C #631695 AU58**

The above coin is a beautiful AU58 graded by PCGS. It was first offered in Legend's January, 19, 2019 Regency sale, Lot# 145. It was listed with a PCGS number #631695 and Cherrypicker's Guide listing number as FS-901.

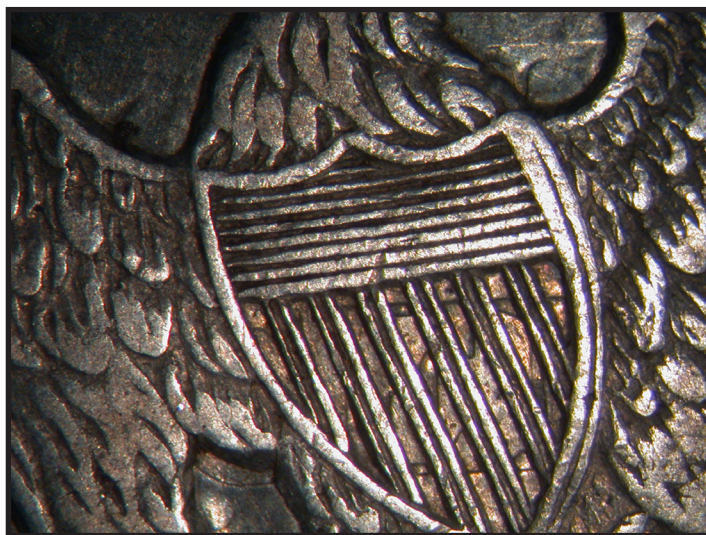
What we have here is an 1858 Seated Liberty Quarter with a clash mark on the reverse from a Flying Eagle cent. The catalog description give a bit of history about the coin. It was discovered by David Berryhill, who works for Americana Rare Coins in Folsom, CA. The story about his find is highlighted below in a story by the shop's co-owner, Steve Feltner. It was shown to John Dannreuther, Fred Weinberg and Bill Fivaz. All agreed with the attribution. Bill Fivaz assigned a Cherrypicker's number on the fly and John Dannreuther got PCGS to assign a coin number to the variety.

At the March Baltimore show Bruce Jennings showed me second example, which he was going to send to PCGS. It will probably grade XF45. Bruce was kind enough to allow me to study the variety.

The die pair was listed by Larry Briggs as die pair 2-B. He noted the following about the dies :

**Obv 2: Irregular Date**

**Rev B:** Heavy die clash above both eagle's wings and within the shield. Die scratch runs down from eagle's armpit.



**Clashed die.**

**Image reversed to show E in correct orientation**



The clash is clearly visible inside the shield as something, but it takes a bit of looking to make out that it is the reverse of a Flying Eagle cent. If you look at the reverse image of the shield below, you can see plainly the letter E inside the shield.

The next image shows an overlay with the quarter die in the correct orientation and the reverse of the cent reverse reversed. This shows where the letters should line up. No evidence of the wreath from the cent is visible on the quarter.

The top of the NE of ONE is clearly visible in the field area above the left point of the shield. The top of the C in CENT is very boldly impressed into the field below the armpit of the eagle's right wing.

Below that is a reversed image of the overlay showing where a cent having the same clash would likely show it. This has not been found yet and may not exist.

Curiously, there is selective die burnishing on the lower right half of the coin from 2:00 to 7:00. It is possible that the clash was so strong that it was noticed and parts were effaced prior to the die being put back into production. Is this die with heavy erosion in selected areas the earliest die state?



*Overlay of cent image (reversed) over the quarter*



*Selective die burnishing*

This is an interesting variety, more are certainly out there to be found and the corresponding cent would be a neat find as well.

I don't think this was an intentional error or a fancy piece made for profit. Just as in the 1857 multi-denominational clashed dies, the clash likely happened when the dies were being changed out.



*Overlay of cent image with the quarter image (reversed)*

In the die changing process the press was turned once to check the spacing between the dies. This is more imperative when changing denominations, say from cent to quarter. The clash occurs and the spacing is corrected. Accident or intentional, the variety is pretty cool.



*Finding the 1858 Clashed Quarter*  
*By Steve Feltner*



For most of us in the numismatic community, a once in a lifetime coin find comes around, well, once in a lifetime. For me, the recent discovery of a previously unknown variety of Seated Liberty Quarters, was my once in a lifetime. After the FUN show in January, 2017 I returned home to Sacramento, CA. After being at my coin shop, Americana Rare Coin, for around 5 minutes, my business partner, Glenn Holsonbake, handed me an 1858 seated liberty quarter and very enthusiastically exclaimed, “tell me what you see!” Exhausted from travel, and being a little under the weather, I looked and said, “just tell me what you’re seeing.” Glenn, still enthusiastic, said, “look in the shield, doesn’t that look like a clashed die?” I grabbed my loupe and examined the coin. To my surprise I saw some very clear letters both in and around the shield. I told Glenn that I would research it more the next day. The next morning when I showed up to the office I was met by our employee David. It was at this point that I was told the whole story behind the quarter.

About a month previous, David had received a collection of coins from a friend in New York. Since they knew he worked at a coin shop, they trusted him to liquidate the collection which consisted of a few thousand dollars. A month later they sent him a few raw coins as a thank you for all of his help. One of the coins that they had gifted to him was an 1858 seated liberty quarter. David looked at the coin and couldn’t tell if it had been cleaned or if what he was seeing were die polish lines. He took the coin to Glenn who said he believed they were polish lines, but to have me look at it after I returned from the FUN show. This discovery excited David as it meant that the coins value was over \$100. David, having access to high resolution photography equipment, decided to take close up pictures and see if he could determine cleaning vs die polish from them. After blowing up the photos he noticed some abnormal die issues on the reverse. Poring over the photos more, he noticed what he believed to be font serifs. He then showed this to Glenn, who suggested it may be a clashed die. But, since there

was nothing on the obverse design of a seated quarter matching the clashed letters, they were stumped. David decided to do a Google search of seated quarter clashes and discovered that there is a known clash on 1857 seated quarters with a reverse clash of a flying eagle cent. This particular clash is known as FS-901. David then took a reverse photo of a flying eagle cent and super-imposed it onto the reverse of the photo of the quarter. To his surprise, they matched perfectly! He showed this to Glenn who suggested that the coin could actually be a new discovery. After scouring the internet and a few numismatic books, they came to the definitive conclusion that none had been reported on 1858 quarters.

At this point it became my personal mission to get this coin into a PCGS holder and attributed. I knew that the first step would be to have the coin determined authentic by John Danreuther, one of the founders of PCGS and numismatic scholar. I took the photos that David had taken and sent them via email to John. He responded within hours and was very excited about the prospect of this discovery. I agreed to take the coin with me to the next major coin show so that he could view it in person. At the Long Beach Expo in June I found John and showed him the coin. Within half a minute he determined the clash to be authentic and invited me to go with him to the table of Fred Weinberg. Fred took a look at the coin, and much like John, determined very quickly that the coin was authentic and was the first of its kind that he had seen. This was a very important moment because the two numismatists required by PCGS to “bless” this coin had just done it. For the next 10 minutes we sat at the table and decided what should be on the PCGS label. Fred wrote on the PCGS form that he had personally verified the coin, and signed off on it.

Fast forward a few weeks and the coin was returned to us in an AU-58 PCGS holder with the die clash recognized. I knew that the last and final piece of the puzzle would be having the FS (Fivaz-Stanton) number recognized as a variety. I was able to obtain the email of Bill Fivaz from a good friend and sent him all of the information. He responded very quickly and gave it a new FS number. We then took the coin, added the new FS number onto a PCGS submission form, and sent it for its final time to have it added to the label.

In the middle of June I took the coin with me to the ANA’s Summer Seminar as I knew there was a class focused on seated liberty coinage. I met up with John Frost, one of the instructors for the class, and explained what it was and gave him all the photos that he would need to show to the students of the class. He was very excited about the discovery and that he was one of the first people to hear about it. His report after the class was that the coin was met with a lot of excitement and wonderment over how and why it was produced.

Having talked to many different people on the subject, the only conclusion that I can come to is that the coin was absolutely a premeditated production by a mint employee. What myself and multiple others have come to believe is that this particular seated quarter reverse die was either about to be, or was, retired. The reason we believe this, is the die would have to be completely altered to do a strong clash and if a large number were produced, the employee could get caught, or more of this particular clash would likely have been found. What I have come to believe is that a mint employee who was working at one of the presses saw an opportunity to make a unique coin. Whether or not he was the same employee to clash the reverse of the 1857 seated quarters with the reverse of a flying eagle cent as well is a possibility. He likely took out the obverse die that was currently striking coins, and replaced it with the reverse of a flying eagle cent. After striking the two reverse dies together a time or two to ensure that some design elements were transferred, he would have then placed the seated obverse die back into place. How many coins he struck with the clashed dies is unknown. This could be a unique piece that was discovered on accident almost 160 years after it was produced, or it could have some siblings out there waiting to be found. Only time will tell. The exciting thing about this is the knowledge that there are other major varieties out there in a collection, baby food jar, desk drawer, etc just waiting to be discovered.



*Another Counterfeit 1867 Snow-8 Indian Cent*  
*By Richard Snow*



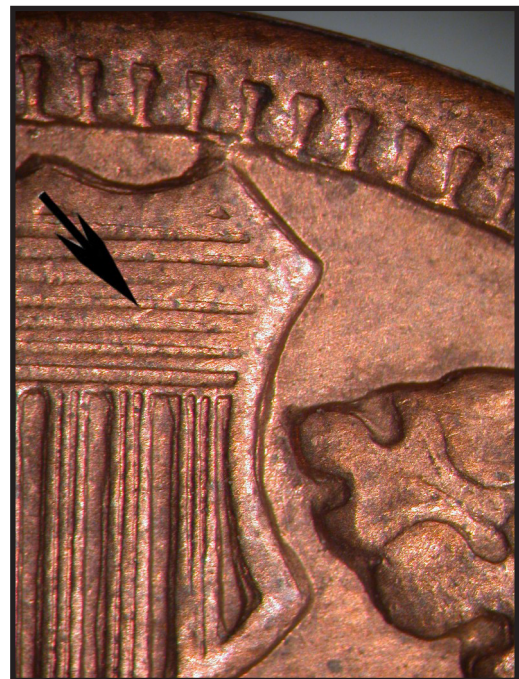
*1867 S8 CFT Obv. 1*



*Bold N CFT Rev. 1*



*1867 S8 CFT Obv. 1*



*1867 S8 CFT Obv. 1*

This is a previously reported counterfeit, listed in the *Attribution Guide*<sup>1</sup>. In the *Attribution Guide*, I called out for additional examples to identify repeating damage. This example has surfaced and the repeating defects have been identified.

On the obverse there are two small marks in the hair above Lady Liberty's ear. The counterfeit die was made by direct transfer from a Snow-8 "Scarface" variety which has numerous die scratches on the face.

The reverse is a Bold N, which should automatically raise a red flag, since this design was first used in 1870. The counterfeit die could be paired with an obverse die of any date, so it is very important to

identify it. The die is very well made and repeating defects are very minor. Nevertheless a small diagonal mark in the shield has been found on all examples seen. It may be important to note the characteristics of the original coin used to make the counterfeit die. It has the shield connected to the denticles and the olive leaf very far away. There are strong outlines inside the ONE CENT. Also note the weak areas in the shield.

<sup>1</sup> *Flying Eagle and Indian Cent Attribution Guide, 3rd Edition.*  
Richard Snow 2014, Page 465.



*A New Counterfeit 1909-S Indian Cent*  
*By Richard Snow*



*1909-S CFT Obverse #3*



*1909-S CFT Reverse#3*



*1909-S Snow-1 Rev. A*



*1909-S CFT Reverse#3*

In the *Attribution Guide*<sup>1</sup>, I list two well made 1909-S die struck counterfeits. While I could fill many pages on added mint mark counterfeits, the die struck examples can be mass produced and so their diagnostics should be published. The present example was found in an old-time collection and donated to the Fly-In Club Counterfeit Library by Charmy Harker.

The quality of this counterfeit is quite good and if looked at only in an album might fool anyone. The mint mark is slightly misshaped and the left edge of the S is over the left half of the denticles below. The two genuine reverse dies show the left edge of the S over the right edge of the denticle below.

<sup>1</sup> *Flying Eagle and Indian Cent Attribution Guide, 3rd Edition.*  
Richard Snow 2014.

There is an outline to the denticles to the left of the mint mark on the counterfeit. This feature is also found on the genuine Snow-1 die pair. All genuine 1909-S Indians have slightly weak first three feather tips. This counterfeit is slightly weak in these areas as well, although they are slightly sharper than usual.

The main condemning feature is the sharp edge. To find this you would have to look at the coin out of any sort of holder or album. The genuine 1909-S has a beveled edge.

Although this is an old fake, likely made in the 1970's, it is the most deceptive one I have yet seen.



*Burnished dies*  
*By Richard Snow*

Burnished dies are dies that have been aggressively abraded to the extent that the devices or field areas are deformed. I have been seeing this die modification on a number of dies in many series, so I think we should identify this as what it is and not just call it “die wear.”

The recently attributed 1890 S-21 Indian cent and the 1858 Clashed quarter featured on the cover of this issue both show evidence of extreme die deformation. On the 1890 it is everywhere on the obverse except the date and on the 1858 quarter it is localized to the right and lower half of the reverse.

Some previously attributed Indian cent varieties have this same localized die deformation, such as the 1880 S14 (April, 2017 issue of Longacre’s Ledger) and 1886 Type 2 S7. There are likely many others once we start identifying them properly. In other series, besides the aforementioned 1858 Seated Liberty quarter with a reverse clash, I noticed the 1883-O VAM-1C1 Morgan dollar also has burnished die. It was this VAM listing, in fact, that alerted me to the difference between a burnished die and a late die state.

The VamWorld.com listing for 1883-O VAM-1C1 Buffed Reverse says the following:

*Discovered by Brent Fogelberg, April 2000. Revised 2009*

**1C1 (revised) III2 1 • C3a (Buffed Reverse) (181)**  
**I-3 R-6**

**Obverse III2 1** - Die marker - Two diverging polishing lines in lower right hair opening.

**Reverse C3a**— Letters of *In God We Trust* and *UNITED STATES* plus left wreath have raised and depressed areas around them due to heavy buffing of die. Some die states show light die clash marks. Earliest die stages of this reverse are not clashed.

What we are looking at is deformation which might easily be interpreted as die wear, but it was not done while the die was in the press, it was done while the die was on the workbench.

One might think of a wire brush on a wheel creating this distortion, but I am unsure at this point what the tool is that caused it. These worked-on areas may be the whole die, or they may be localized, as in the 1858 quarter.



**1883 O VAM 1C Buffed Wreath**

**1883-O VAM 1C1. VamWorld.Com**

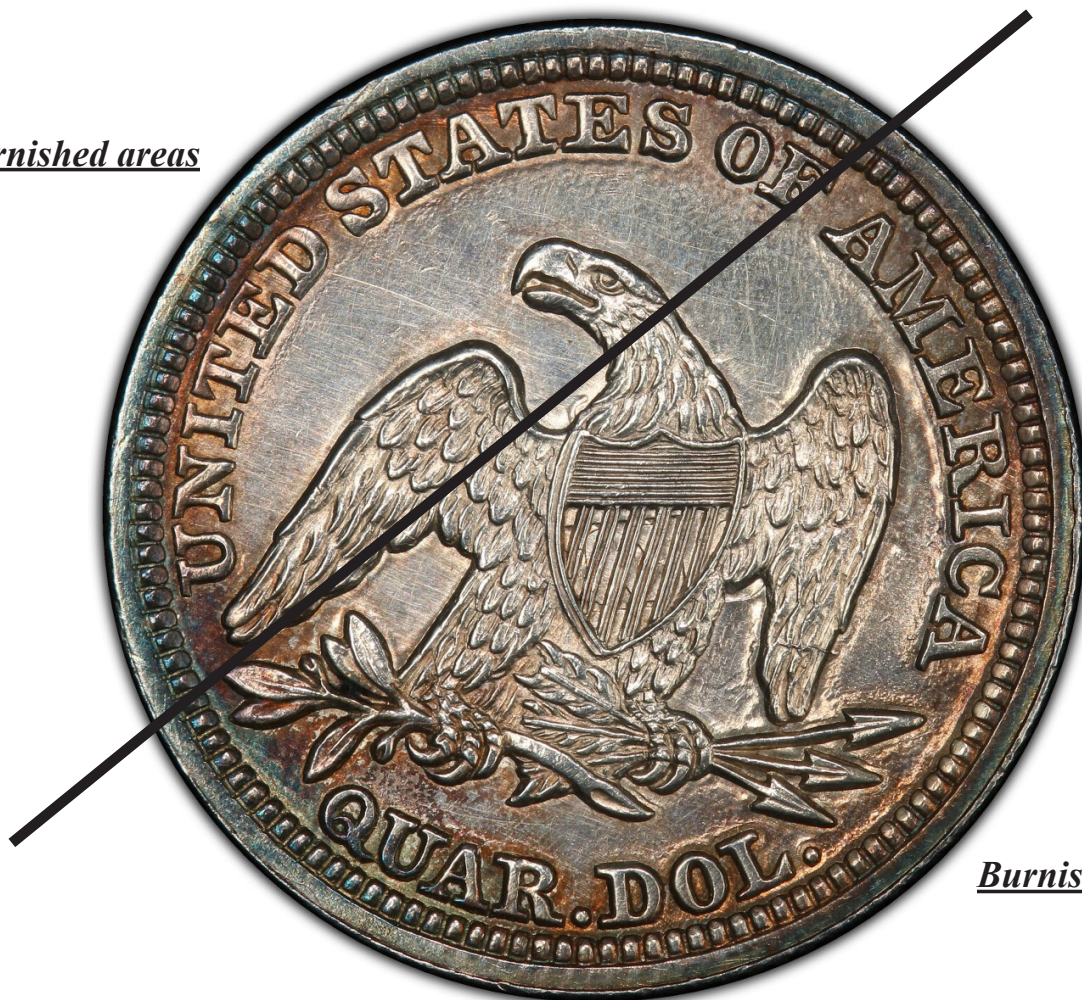
In addition to this attribution, there are some instances where a burnished die has been rehugged. This would create a doubled die. This type of doubled die would be a Class II, Distorted Hub doubled die. Not all burnished dies show doubling. The doubling on this type of variety may be difficult to detect, as there may not be any movement or spread between the impressions of the hub. The second impression may be exactly positioned over the first (burnished) impression.

The 1880 S14 shows this clearly as does the 1890 S21 (New attribution in this issue). The pick-up is the sharp details within the distorted areas.

The scenario for this goes like this: A die is hubbed and maybe put into service, maybe not. In either case it is taken out, annealed (made soft) and burnished on the workbench. This burnishing leaves



Unburnished areas



Burnished areas

*Partially burnished die - 1858 Seated Liberty Quarter.*



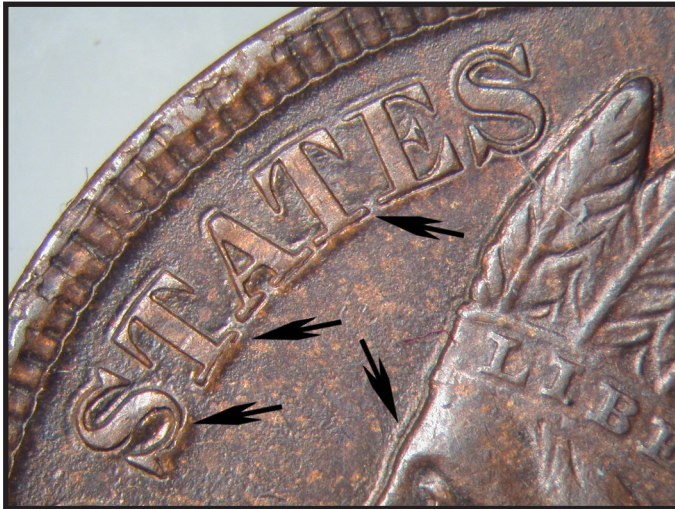
*1880 S14 shield. Class II Doubled Die.*



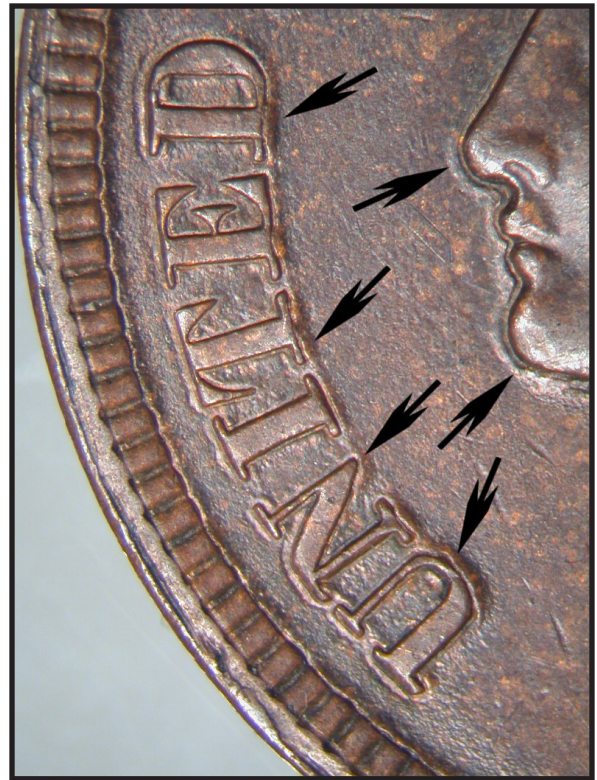
*1880 S14 reverse. Class II Doubled Die.*



very distorted details on the worked-on areas. Perhaps it was deemed to be too aggressive. It is then annealed again and rehubbbed. Now all that remains of the bur-nished details are the outlines of the worked-on areas.



1890 S21 Class II Doubled die.



1890 S21 Class II Doubled die.

## NEW ORLEANS RARE COINS

SPECIALIZING IN

Flying Eagle Cents • Indian Cents • Varieties

[NewOrleansRareCoins@gmail.com](mailto:NewOrleansRareCoins@gmail.com)

I Attend Several Major Coin Shows

Send Me Your Want List

Buy • Sell • Trade • Appraisals

Lynn Ourso  
P.O. Box 1  
Brusly, Louisiana 70719  
225-937-5105



**Longacre's Deathbed Letter.**  
**By Richard Snow**

At the FUN show in January I was walking by John Kreailavich's table when he jumped up, pointed at me and said in a you-better-know-this voice: "When did James Longacre die?" I said right back, like it was something everyone would know, "January 1, 1869." He then shuffled around his case and said "I've got something you gotta see!"

So he pulls out two letters in Longacre's hand. One is dated October 5, 1868 and the other once is dated December 26, 1868 - less than a week before Longacre passed away! These are accompanied by envelopes addressed to William Key. Additional notations from a different hand on the envelopes note that the letter is from Longacre. The note on the second one adds "One week before death."

Wow! This was a significant find. I asked John where it came from. "These were in William Key's estate and it was dispersed just recently. The owner held these back as something special."

This was something I had to have and we made a deal on them. I had them in my back up case at the show and soon I was getting numerous requests to see the letters.

**Letter #1**

1206 Spring Garden St. Oct. 5, 1868

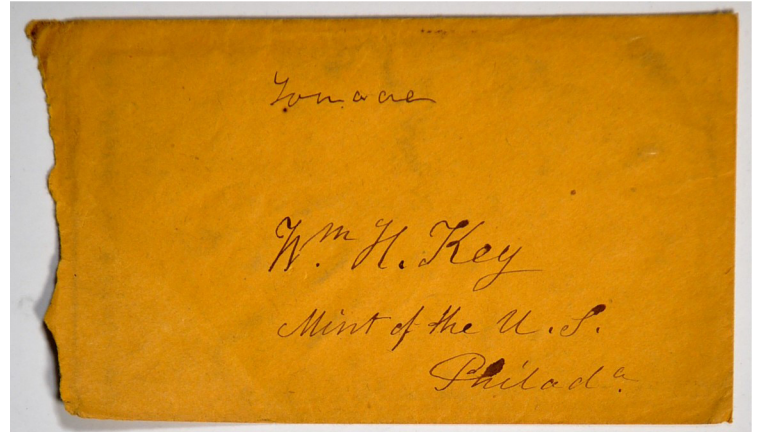
Mr Key

If I am inquired for at the Mint  
I wish you to say that I am con-  
fined to my room today -

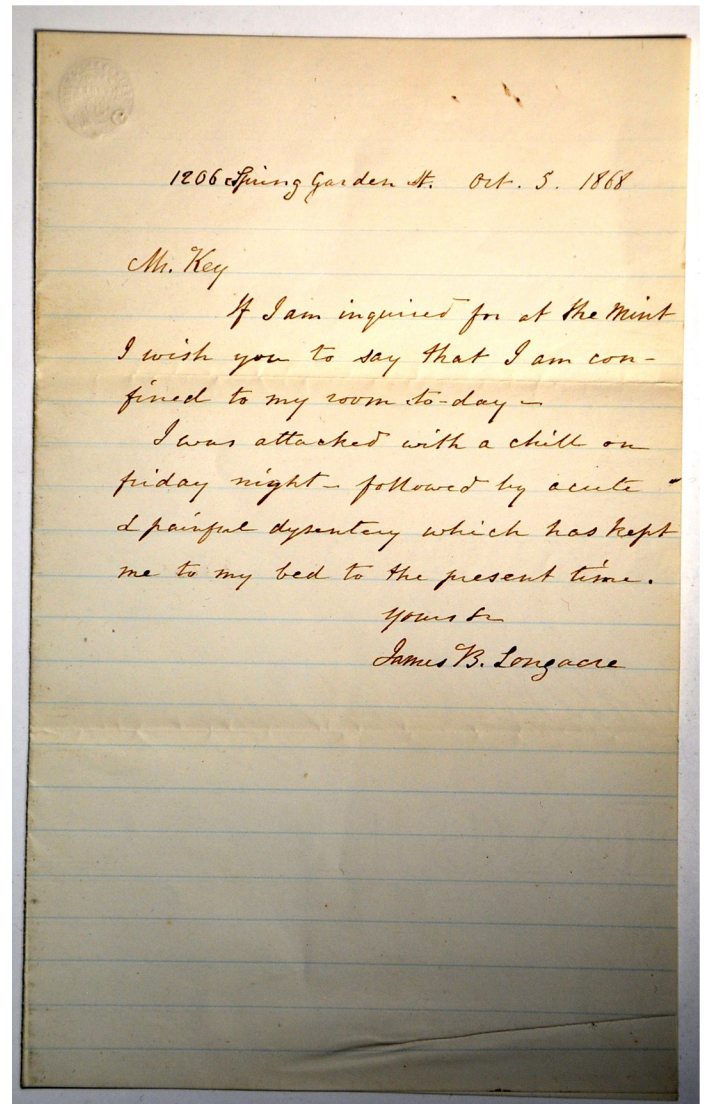
I was attacked with a chill on  
Friday night - followed by acute  
& painful dysentery which has kept  
me to my bed to the present time.

yours etc.,

James B. Longacre



**Envelope #1**  
Wm. H. Key  
Mint of the U.S.  
Phila. Pa.





The October 5th letter tells us of Longacre's worsening health in the fall of 1868. Chills and dysentary kept him confined to his home on 1206 Spring Garden Street. His address today is the Spring Garden train terminal nestled between the North and South overpass of I-95, two blocks away from the Delaware River.

Longacre lived about 2 miles from his work at the Mint, which was on the corner of Chestnut and Juniper Streets. This was not a walkable distance, at least on a daily basis.

If Spring Garden Street rings a bell, it may be that it was the street on which the Third Mint was located, but that was built in 1901 and was far away up the hill at 1700 Spring Garden Street.

The second letter shows that Longacre was concerned with work at the Mint and was directing Assistant Engraver William Barber about making dies for a pattern Eagle. He instructs Barber not to cut it too close up, but to merely lower the table (field area) so as to make the striking easier.

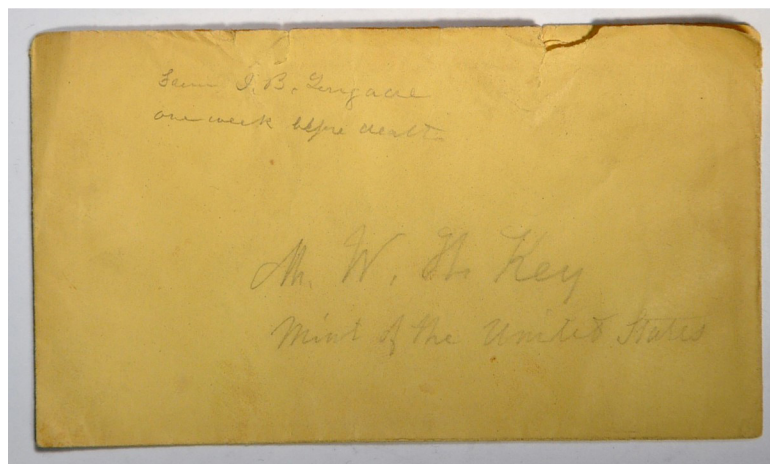
#### Letter #2

1206 Spring Garden St.  
Dec. 26, 1868

Mr Key

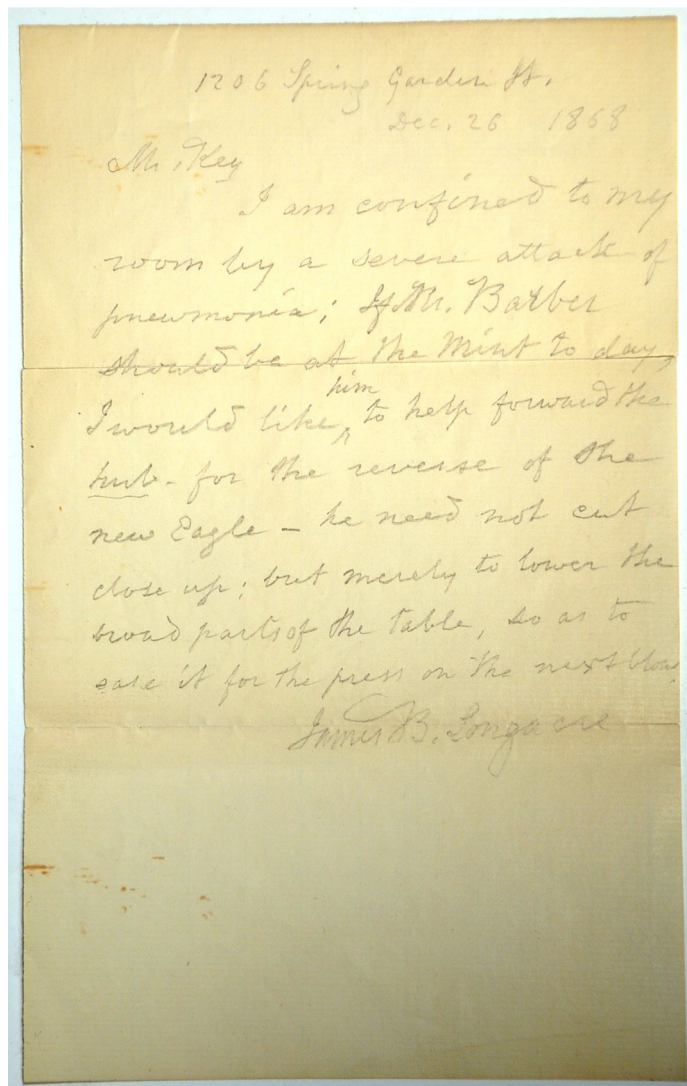
I am confined to my room by a severe attack of pneumonia; If Mr Barber should be at the Mint to day I would like him to help forward the hub for the hub of the new Eagle - he need not cut close up; but merely to lower the broad parts of the table, so as to ease it for the press on the next blow.

James B. Longacre



#### Envelope #2

Wm. H. Key  
Mint of the United States







*Longacre's Liberty Head Eagle 1868. Judd-661 (gold)*

This part of the letter is intriguing. At the show John Dannreuther stopped by and tried to figure out what Longacre meant by this. He texted Craig Sholley who made these comments:

*"I find it kind of odd that Longacre felt the need to be so specific. Barber should have known what to do. But, the guy was sick and probably not thinking straight. Either that or he was a control freak."*

*The mint used the term "table" as a generic for the face of a die. So, in this case, table = fields.*

*So, he wants Barber to cut away extraneous metal in the field of a hub (probably working hub) to allow for another impression from the working master die. Just like with a die, it is necessary to cut away excess metal pushed up and out by the hubbing to allow for successive impressions to fully bring up the design.*

*Barber need not cut close to the details, just cut away and taper the broad sections of the field to allow the metal to flow."*

The design likely being delt with here is the Judd-661 Eagle which has Longacre's Liberty head adapted from the three-cent piece of 1865. The reverse

is an eagle design likely done by Assistant Engraver Anthony Paquet. This attribution is made by the use of the tall lettering typically found on Paquet's work. Also the design is dissimilar to anything done by Longacre.

Longacre passed away on New Year's Day 1869. A memorial meeting was held at the Mint on January 5. Eulogies were given by Dr. H.R. Linderman:

*"Mr. Longacre, my friends, was no ordinary man. His talents were of high order, and would, with his industrious and frugal habits, have enabled him to achieve success and distinction in any professional or business career. His refined nature, however, appeared to avoid the sharp conflicts of life, and he sought, in quiet devotion to art, a congenial field exercise of his powers, and in it he achieved a success sufficient to satisfy a reasonable ambition. He reached by merit the honorable position of engraver of the National Mint, and so discharged its duties for a period of a quarter of a century as to command the continued confidence of the government and the public."*

*"Mr. Longacre was a man of strong religious faith, and adorned that faith by his daily walk and conversation. Like all truly great and good men, he was modest in deportment. His official duties were performed with a faithfulness worthy of all commendation; whilst his intercourse with his brother officers and subordinates was characterized by dignity, frankness, and urbanity, and the utmost kindness. After a long and useful life, and with faculties unimpaired, our friend passed peacefully and contented to his rest. Let us ever cherish his memory, and strive to emulate his virtues."*



# **WANTED**

**Flying Eagle  
and  
Indian Cent  
collectors**



**Join the  
FLY-IN CLUB**

Send \$25 to  
Fly-In Club  
P.O. Box 559  
Sandwich, IL 60548

Paypal to:  
[devilslakeguy61@gmail.com](mailto:devilslakeguy61@gmail.com)





# Women In Numismatics

WomenInNumismatics.com

Founded in 1991, WIN is the premiere organization for women in the field of numismatics.

As a nationally incorporated nonprofit, our chartered goals are to encourage fellowship and learning through networking and social events, as well as offering educational seminars, scholarship programs, and our semi-annual literary publication, *Winning Ways*.

President Charmy Harker is leading the board in a revitalization of WIN, focusing on expanding membership and providing social-media platforms for members to connect, discuss, and promote their brands.

Collector or dealer, novice or expert, we invite you to join us in the largest and most respected organization for Women In Numismatics.



## APPLICATION FOR MEMBERSHIP

### MAIL TO:

#### Women in Numismatics

Cindy Wibker, Secretary

PO Box 471147

Lake Monroe, FL 32747-1147

Regular Membership	\$25
Associate Membership <sup>1</sup>	\$10
Junior Membership <sup>2</sup>	\$5

Payable January 1st each year

Please enclose check with your application

## THANK YOU!

Questions?

[www.womeninnumismatics.com/contact-us](http://www.womeninnumismatics.com/contact-us)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Referred By: ☐ ☐ ☐ ☐ ☐

Significant Other to Regular Member: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Optional:

Describe your interests in numismatics (collector or dealer; specialty, related organizations, etc.):

---

---

Are you interested in being of service to WIN?

(writing articles, speaking, serving on the board, fundraising, etc.) \_\_\_\_\_

---

---

What goals would you like to accomplish as a member of WIN?

---

---

<sup>1</sup> Significant Other to a Regular Member    <sup>2</sup> Age 18 or Younger




# Do you have varieties to add to the condition census?

Let us all know by contributiong  
to the Fly-In Club Forum.

**[www.fly-inclub.org/newtalk](http://www.fly-inclub.org/newtalk)**

*Specializing in Flying Eagle, Indian, Lincoln,  
and Early American Copper Cents*



**The Penny Lady**

Charmy Harker  
P.O. Box 61987  
Irvine, CA 92602  
(949) 632-0414  
[charmy@thepennylady.com](mailto:charmy@thepennylady.com)  
[www.ThePennyLady.com](http://www.ThePennyLady.com)

ANA 891 MEMBER

PCGS The Standard for the Rare Coin Industry

NGC Numismatic Guaranty Corporation

CAC

WOMEN IN NUMISMATICS

## 1872 Bold N



*S11 1872, 1/1 (n).*

### **S11 1872, 1/1 (n). Bold N.**

*Obv. 20: (LH) Minor repunching above the base of the 1. A series of die scratches are visible near the denticles from 10:00 to 1:00. A die crack runs from the bust point through the UNI to the rim at 8:00. A die crack connects the tops of AT in STATES and runs above the first A.*  
*Rev. T3-P: Shield points and olive leaf well away from the denticles. Two die cracks from the rim at 8:30 and 9:00 connect at the outer edge of the wreath and travel upward to connect with the rim at 11:00.*

*Attributed to: Ed Nathanson*

The repunching is minor and may not get a premium due to the enhanced value and rarity of the date.

The original listing of S11 was delisted in 2018 as it was found to be a duplicate of S2. {58}

## 1874



*S11 1874, Die File Marks by Eye.*

### **S11 1874, Die File Marks by Eye.**

*Obv. 12: (LH) Heavy die file mark by Lady Liberty's eye. Date Very high, close to portrait.*

*Rev: K: Shield points and olive leaf are well away from the denticles.*

*Attributed to: Jody Faust*

A very heavy die file mark from the center of the eye to the tip of the nose. {40}



*S11 1874, Date area.*



# 1889

★★



**S42** 1889, 8/8 (s), 9/9 (n).

## **S42 1889, 8/8 (s), 9/9 (n).**

*Obv. 43: () Moderate repunching visible under the 1. Strong repunching on the 9.*

*Rev. AO: Shield points connected to the denticles. Olive leaf away from the denticles.*

*Attributed to: David Killiough*

The repunching on the 8 is moderate. The repunching on the 9 may not always be visible. {58}

★★



**S43** 1889, Burnished Obverse Die.

## **S43 1889, Burnished Obverse Die.**

*Obv. 44: (B) Selective burnishing on the die from 5:00 to 8:00. Rough areas under the chin, by the neck and by the denticles and below the date. Heavy clash mark from the C in CENT by Lady Liberty's nose.*

*Rev. AP: Shield points and olive leaf connected to the denticles.*

*Attributed to: David Killiough*

Heavy burnishing of the obverse die only in selected areas. {50}



**S43** 1889, Burnished Obverse Die.

# 1890



**S21 1890, 890/890 (w), Rehugged die over Burnished obverse die.**

*Obv. 23: (B) Rough repunching visible inside the loops of the 890. Very rough bold outlines to the legend and portrait only. There are no outlines on the date.*

*Rev. W: Shield points and olive leaf well away from the denticles. Heavy die polish lines inside the wreath at 2:00 to 3:00.*

*Attributed to: Rick Snow*

This is a Class II doubled die, defined as Distorted Hub doubling. The pick-up is the sharp details of the devices surrounded by the rough outlines around the legend and portrait. The cause of these outlines is a heavy burnishing of the die, similar to wire brushing or heavy polishing. The die was then rehugged to sharpen the details.

It is worth noting that the date area does not have similar deformation. In fact, there are fine die polishing

lines near the date similar to early die state pieces. This is likely an artifact of finishing the die after the date was repunched.

The rough outlines are raised above the field. These would be sunken in the die. We do not see any areas sunken on the coin that would be caused by raised metal on the die. This is consistent with a doubled die as any raised areas on the die would likely be pressed out during a second hubbing. {58}



# 1890



S21 1890, Distorted outlines.



S21 1890, 890/890 (w).



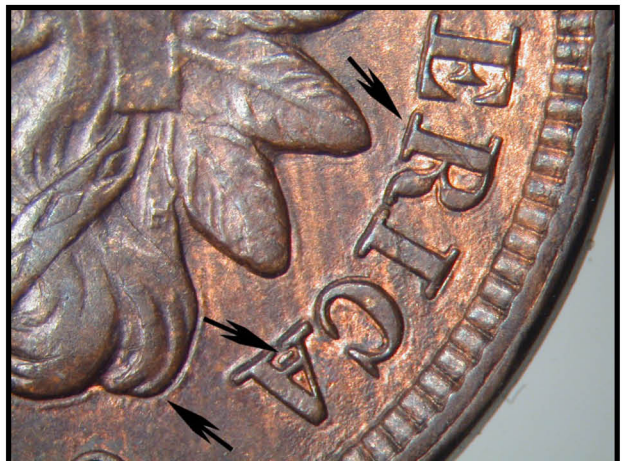
S21 1890, Distorted outlines.



S21 1890, Distorted outlines.



S21 1890, Distorted outlines.



S21 1890, Distorted outlines.



# 1898

## S45 1898, 18/18 (s).

*Obv. 48: (C)* Minor repunching visible under the flag of the 1. Very minor repunched on the base of the 8.

*Rev: AX:* Shield points well away from the denticles. Olive leaf just attached.

*Attributed to: David Killough*

Minor repunching mostly on the flag of the 1. Very similar to S19 and S30. Compare date positions. {40}



S45 1898, 18/18 (s).

# 1898



## S46 1898, 18/18 (s), 98/98 (n).

*Obv. 49: (RH)* Minor repunching visible under the flag and base of the 1. Very minor repunched on the base of the 8. Very minor repunching visible inside the lower loops of the 98.

*Rev: AY:* Shield points and olive leaf connected top the denticles.

*Attributed to: David Killough*

Minor repunching most visible on the 1. {63BN}

S46 1898, 18/18 (s), 98/98 (n).



# 1902



**S19** 1902, 1/1 (e), 1/1 (s).

## **S19** 1902, 1/1 (e), 1/1 (s).

**Obv. 22: (LE)** Repunching far to the left of the date. Minor repunching on the base of the 1. Deformed denticles under the 1. Strong clash marks between the feathers.

**Rev. S:** Olive leaf away from the denticles. Shield points connected. Strong clash marks inside the wreath on the right side only.

*Attributed to: David Killough*

The repunching is so far to the east that it could be easily missed. {55}

# 1907



**S70** 1907, 19/19 (w).

## **S70** 1907, 19/19 (w).

**Obv. 72: (LH)** Minor repunching visible on the left edges of the 1 and at the base of the 9.

**Rev. BO:** Shield points just connected to the denticles. Olive leaf well away.

*Attributed to: Ed Nathanson*

The repunching is most visible on the 9. {58}





Stack's Bowers Galleries Presents

# The ESM Collection of Proof Flying Eagle and Indian Cents

Featured in our Official Auction of the ANA World's Fair of Money®

Rosemont, Illinois • August 13-16, 2019 • Consign U.S.Coins by June 24, 2019

The ESM Collection of Proof Flying Eagle and Indian Cents provides an incredible opportunity for small cent enthusiasts. Ideal for Registry Set collectors, the ESM Collection contains remarkable Proof cents in stunning condition, many at the top of the PCGS population.



1856 Flying Eagle.  
Proof-65 (PCGS).



1858 Large Letters.  
Proof-65 Cameo (PCGS).



1860 Proof-66  
Cameo (PCGS).  
*Tied for Finest Graded*



1863 Proof-65  
Deep Cameo (PCGS).  
*Finest Graded at PCGS*



1864 Bronze. Proof-65  
Red Deep Cameo (PCGS).  
*Finest Graded at PCGS*



1864 Bronze. L on Ribbon.  
Proof-65 Red Cameo (PCGS).  
*Finest Graded; Ex Norweb*



1871 Proof-66 Red  
Cameo (PCGS). CAC.  
*Finest Graded at PCGS*



1872 Proof-66 Red  
Cameo (PCGS).  
*Finest Graded at PCGS*



1873 Close 3. Proof-66  
Red Cameo (PCGS).  
*Tied for Finest Graded*



1875 Proof-66 Red  
Cameo (PCGS).  
*Finest Graded at PCGS*



1877 Proof-67  
Red (PCGS).  
*Tied for Finest Graded*



1878 Proof-67  
Red (PCGS). OGH.  
*Finest Graded at PCGS*



1880 Proof-67 Red  
Cameo (PCGS). CAC.  
*Tied for Finest Graded*



1888 Proof-66 Red  
Cameo (PCGS).  
*Tied for Finest Graded*



1889 Proof-66 Red  
Cameo (PCGS).  
*Finest Graded at PCGS*



1890 Proof-65 Red  
Cameo (PCGS).  
*Tied for Finest Graded*



1896 Proof-67 Red  
Cameo (PCGS).  
*Finest Graded at PCGS*



1902 Proof-67 Red  
Cameo (PCGS). CAC.  
*Tied for Finest Graded*



1906 Proof-67 Red  
Cameo (PCGS). CAC.  
*Tied for Finest Graded*



1909 Indian. Proof-66+  
Red Cameo (PCGS). CAC.  
*Tied for Finest Graded*

**CONTACT US FOR MORE INFORMATION!**

West Coast: 800.458.4646 • East Coast: 800.566.2580 • Email: [Info@StacksBowers.com](mailto:Info@StacksBowers.com)

**LEGENDARY COLLECTIONS | LEGENDARY RESULTS | A LEGENDARY AUCTION FIRM**

**Stack's Bowers**  
GALLERIES

America's Oldest and Most Accomplished Rare Coin Auctioneer

1231 E. Dyer Road, Suite 100, Santa Ana, CA 92705 • 949.253.0916

123 West 57th Street, New York, NY 10019 • 212.582.2580

[Info@StacksBowers.com](mailto:Info@StacksBowers.com) • [StacksBowers.com](http://StacksBowers.com)

California • New York • New Hampshire • Hong Kong • Paris

SBG LongLedge ANA2019 ESM 190312